CCORP Data Specifications for STS Vendors

Version 1.2

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1. CCORP Data Elements

California CABG Outcomes Reporting Program (CCORP):
Data Elements Adopted by the CABG Clinical Advisory Panel, 5/7/02

IDENTIFICATION AND CLASSIFICATION	
Facility Identification Number	STS (Modified)
Isolated CABG: Yes; No	Non-STS
Responsible Surgeon Name (3 separate fields): Surgeon Last Name; Surgeon First Name; Surgeon Middle Initial	STS (Modified)
Responsible Surgeon CA License Number	Non-STS
Medical Record Number	STS
Date of Birth: mm/dd/yyyy	STS
Date of Surgery: mm/dd/yyyy	STS
Date of Discharge: mm/dd/yyyy	STS
Discharge Status: Alive; Dead	STS
Date of Death: mm/dd/yyyy	STS
RISK FACTOR: DEMOGRAPHIC	
Race: Caucasian; Black; Hispanic; Asian; Native American; Other	STS
Gender: Male; Female	STS
Patient Age: Calculated	STS
Height (cm)	STS
Weight (kg)	STS
RISK FACTOR: OPERATIVE	
Status of the Procedure: Emergent/Salvage; Emergent; Urgent; Elective	STS
RISK FACTOR: COMORBIDITY/OTHER	
Last Creatinine Level Preop (mg/dl)	STS
Dialysis: Yes; No	STS
Diabetes: Yes; No	STS
Peripheral Vascular Disease: Yes; No	STS
Cerebrovascular Disease: Yes; No	STS
Cerebrovascular Accident: Yes; No	STS
Cerebrovascular Accident Timing: <=2 weeks; >2 weeks	STS
Chronic Lung Disease: No; Mild; Moderate; Severe	STS
Hypertension: Yes; No	STS
Immunosuppressive Treatment: Yes; No	STS
Hepatic Failure: Yes; No	Non-STS
RISK FACTOR: CARDIAC	
Arrhythmia: Yes; No	STS
Arrhythmia Type: Sustained VT/VF; Heart Block; Afib/flutter	STS
Myocardial Infarction: Yes; No	STS
Myocardial Infarction Timing: <=6 hours; >6 hours but <24 hours; 1 to 7 days; 8 to 21 days; >21 days	STS
Cardiogenic Shock: Yes; No	STS
Angina: Yes; No	STS
Angina Type: stable; unstable	STS
CCS Classification: No Angina = Class 0; Class I; Class II; Class III; Class IV	STS
Congestive Heart Failure: Yes; No	STS
NYHA Classification: Class I; Class II; Class III; Class IV	STS

RISK FACTOR: PREVIOUS INTERVENTIONS	
Number of Prior Cardiac Operations Requiring Cardiopulmonary Bypass	STS
Number of Prior Cardiac Operations Without Cardiopulmonary Bypass	STS
Prior PCI: Yes; No	STS (Modified)
Interval from Prior PCI to Surgery: <=6 hours; > 6 hours	STS (Modified)
RISK FACTOR: HEMODYNAMIC STATUS	
Ejection Fraction (%)	STS
Ejection Fraction Method: LV Gram; Radionuclide; Estimate; ECHO	STS
Left Main Disease (% Stenosis)	STS (Modified)
Number of Diseased Coronary Vessels: None; One; Two; Three	STS
Mitral Insufficiency: None; Trivial; Mild; Moderate; Severe	STS
PROCESS OF CARE	
Internal Mammary Artery(ies) Used as Grafts: Left IMA; Right IMA; Both IMAs; No IMA	STS
Cardiopulmonary Bypass Used: Yes; No	STS
Conversion to Cardiopulmonary Bypass: Yes; No	STS
Primary Incision Full Sternotomy; Partial Sternotomy; Transverse Sternotomy; Right Vertical Parasternal; Left Vertical Parasternal; Right Anterior Thoracotomy; Left Anterior Thoracotomy; Posterolateral Thoracotomy; Xiphoid; Epigastric; Subcostal	STS
Cardioplegia: Yes; No	STS

2. CCORP Data Element Specifications for STS Vendors

Data Value Requirements, Non-STS and Modified STS Data Elements and CCORP Soft Data Edits[1]

Data Value Requirements

A valid value must be submitted for the following data elements (i.e., missing or blank data are not allowed):

- Facility Identification Number
- Medical Record Number
- Responsible Surgeon Name
- Responsible Surgeon California License Number
- Isolated CABG
- Date of Surgery
- Date of Discharge
- Discharge Status

If a value for a data element NOT listed above is unknown, not applicable, or otherwise missing, a hospital may submit the record without a value. However, CCORP may ask a hospital to provide data to replace missing values after a hospital report has been accepted by CCORP.

NON-STS DATA ELEMENTS

Please note that the value specifications for these data elements are fixed and no "recoding" of values (e.g. changing 'Yes' to '1') will be allowed. For STS data elements, coding in conformance with STS is allowed.

1. **Field Title**: Isolated CABG
   Field Name: isocabg
   Values/Order: Yes; No
   Data Type/Format: Text; Yes/No
   Field Length: 3
   Definition: When any of the procedures listed in Section A is performed concurrently with the coronary artery bypass surgery, the surgery will be considered non-isolated and the data element coded 'No'. It is not possible to list all procedures because cases can be complex and clinical definitions are not always precise. When in doubt, the data abstractor should first seek an opinion from the responsible surgeon and then consult CCORP.

[1] Soft edits are range checks and relational data checks used to prompt the user when unusual values are entered in the CCORP data collection tool. They are 'soft' because they allow users to continue data entry without changing the value(s) that brings up the warning flag. These are many of the same data checks used to produce the data quality reports (DQRs) sent to hospitals in which OSHPD requests corrections. **Many requests for corrections by OSHPD can be avoided by use of these soft edits**. Our experience with corrected data indicates that in most, but not all cases, soft edits are violated because of data entry errors. For example, in the case of *Dialysis=Yes but creatinine >6.0*, 19 out of 21 (90%) reported errors for the 1999 data period were in fact data entry errors that were later corrected by hospital staff. STS software vendors do not already incorporate such soft edits in their data harvesting tools. Incorporation of these soft data edits will reduce the number of requests for data corrections from OSHPD.

Section A

- Valve repairs or replacements
- Operations on structures adjacent to heart valves (papillary muscle, chordae tendineae, traebeculae carneae cordis, annuloplasty, infundibulectomy)
- Ventriculectomy
- Repair of atrial and ventricular septa, excluding closure of patent foramen ovale
- Excision of aneurysm of heart
- Head and neck, intracranial endarterectomy
- Other open heart surgeries, such as aortic arch repair, pulmonary endarterectomy
- Endarterectomy of aorta
- Thoracic endarterectomy (endarterectomy on an artery outside the heart)
- Heart transplantation
- Repair of certain congenital cardiac anomalies, excluding closure of patent foramen ovale (e.g., tetralology of fallot, atrial septal defect (ASD), ventricular septal defect (VSD), valvular abnormality)
- Implantation of cardiomyostimulation system (Note: Refers to cardiomyoplasty systems only, not other heart-assist systems such as pacemakers or internal cardiac defibrillators (ICDs))
- Any aortic aneurysm repair (abdominal or thoracic)
- Aorta-subclavian-carotid bypass
- Aorta-renal bypass
- Aorta-iliac-femoral bypass
- Caval-pulmonary artery anastomosis
- Extracranial-intracranial (EC-IC) vascular bypass
- Coronary artery fistula
- Maze procedures, surgical or catheter
- Resection of a portion of the lung. (e.g., excision of an emphysematous bleb, lobectomy or segmental resection of lung). Does not include simple biopsy of lung nodule in which surrounding lung is not resected or biopsy of a thoracic lymph node.
- Mastectomy for breast cancer (not simple breast biopsy)

If a procedure listed in Section B is performed concurrently with the coronary artery bypass surgery, the surgery will be considered an isolated CABG and the data element coded ‘Yes’, unless a procedure listed in Section A is performed during the same surgery. These particular procedures are listed because the Office has received frequent questions regarding their coding.

Section B

- Transmyocardial laser revascularization (TMR)
- Pericardiectomy and excision of lesions of heart
- Repair/restoration of the heart or pericardium
- Coronary endarterectomy
- Pacemakers
- Internal cardiac defibrillators (ICDs)
- Fem-fem cardiopulmonary bypass (a form of cardiopulmonary bypass that should not be confused with aortofemoral bypass surgery listed in Section A)

2. **Field Title**: Responsible Surgeon California License Number
   Field Name: surglicnum
   Values/Order: Not Defined
   Data Type/Format: Text
   Field Length: 10
   Definition: California Physician License Number of responsible surgeon, assigned by the Medical Board of California of the Department of Consumer Affairs.

3. **Field Title**: Hepatic Failure
   Field Name: hepafail
   Values/Order: Yes; No
   Data Type/Format: Text; Yes/No
   Field Length: 3
   Definition: The patient has cirrhosis, hepatic failure, acute hepatitis or "shock liver" and has a bilirubin greater than 2mg/dl and a serum albumin less than 3.5 grams/dl.

MODIFIED STS DATA ELEMENTS

1. **Field Title**: Facility Identification Number
   Field Name: hospitalid
   Values/Order: Not Defined
   Data Type/Format: Text
   Field Length: 6
   Definition: The six-digit facility identification number assigned by the Office of Statewide Health Planning and Development

2. **Field Title**: Responsible Surgeon Name
   Field Name: SurgLname; SurgFname; SurgMI
   Values/Order: Not Defined
   Data Type/Format: Text; Uppercase
   Field Length: Last= 25, First= 20, MI= 1 (3 separate fields)
   Definition: Responsible surgeon is the principal surgeon who performs the coronary artery bypass procedure. If a trainee performs this procedure, then the responsible surgeon is the physician responsible for supervising this procedure performed by the trainee. In situations in which the responsible surgeon cannot otherwise be determined, the responsible surgeon is the surgeon who bills for the coronary artery bypass procedure. **(Note: Commas are not allowed in any of these fields)**

3. **Field Title**: Left Main Disease (% stenosis)
   Field Name: lmstenpct
   Values/Order:
   Hard Edits (CCORP): Left Main Disease cannot be <0 or >100
   Data Type/Format: Integer
   Field Length: 3
   Definition: Percentage of compromise of vessel diameter in any angiographic view.

4. **Field Name**: Prior PCI
   Short Name: PCI
   Valid Values: Yes; No
   Data Type/Format: Text; Yes/No
   Field Length: 3

Soft Edits (CCORP): Prior PCI including Balloon and/or Atherectomy and/or Stent Indicated but No Interval from prior PTCA/Atherectomy/Stent to Surgery Given
Source code to detect odd values: PCI = 'Yes' and PCIIntv = 'Missing';
Definition: Percutaneous coronary intervention (PCI) was done at any time prior to this surgical procedure (which may include during the current admission). PCI includes percutaneous transluminal coronary angioplasty (PTCA), intracoronary fibrinolysis without PTCA, laser recanalization, stent implantation, rheolysis with angiojet, brachytherapy, and other catheter-based percutaneous recanalization techniques.

5. **Field Name:** Prior PCI Interval
Short Name: PCIIntv
Valid Values: <= 6 hours; > 6 hours
Data Type/Format: Text
Field Length: 10
Soft Edits (CCORP): No Prior PCI including Balloon and/or Atherectomy and/or Stent Indicated but Interval from Prior PCI to Surgery Given
Source code to detect odd values: PCI = 'No' or PCI = 'Missing' and PCIIntv = '<= 6 hours' or PCIIntv = '> 6 hours';
Definition: The time between prior percutaneous coronary intervention (PCI) and surgical repair of coronary occlusion:
    - <= 6 hours
    - > 6 hours

CCORP SOFT EDITS FOR INCORPORATED STS DATA ELEMENTS (VERSION 2.41)

1. **Field Name:** Mort-Date
   Short Name: MtDate
   Field Title2: Status (Alive/Dead) at discharge from hospital of surgery
   Field Title2: Mort-DC Status
   Short Name2: MtDCStat
   Soft Edits (CCORP): No Mortality – Date given, but Discharge Status entered as 'Dead'.
   Source Code to detect odd values:
   Where MtDate is blank or missing and MtDCStat = 'DEAD'

2. **Field Name:** Patient Age
   Short Name: Age
   Soft Edits (CCORP): Expected Patient Age is between 18 and 95 years.
   Source Code to detect out of range values:
   Where Age < 18 and Age > 95

3. **Field Name:** Height (cm)
   Short Name: HeightCm
   Soft Edits (CCORP): (Male) Height outside expected 135 – 204 cm range.
   (Female) Height outside expected 135 – 191 cm range.
   Source code to detect odd values:
   Where (HeightCm > 191 and Gender = 'Female')
   or (HeightCm > 204 and Gender = 'Male')
   or (HeightCm < 135 and Gender = either 'Female' or 'Male'))

4. **Field Name:** Weight (kg)
   Short Name: WeightKg
   Soft Edits (CCORP): (Male) Weight outside expected 40 – 182 kg range.
   (Female) Weight outside expected 35 – 182 kg range.
   Source code to detect out of range values:
   Where ((WeightKg < 35 and Gender = 'Female') or
   (WeightKg < 40 and Gender = 'Male') or
   (WeightKg > 182 and Gender = either 'Female' or 'Male'))

5. **Field Name:** RF-Last Creat Lvl
   Short Name: CreatLst
   Soft Edits (CCORP): Creatinine outside expected 0.4 to 14.9 mg/dl range.
   Source code to detect odd values:
   Where (CreatLst $\geq$ 15 or (CreatLst > 0.1 and CreatLst < 0.40))

6. **Field Name:** RF-Renal Fail-Dialysis
   Short Name: Dialysis
   Soft Edits (CCORP): When creatinine level >6 mg/dl, dialysis generally coded Yes.
   Source code to detect odd values:
   Where CreatLst > 6 and Dialysis = "No" or Dialysis= "Missing"

7. **Field Name**: RF-CVA
   Short Name: CVA
   Valid Values: Yes; No
   Data Type/Format: Text; Yes/No

Field Length: 3
Soft Edits (CCORP): Cerebrovascular Accident Indicated, but No Cerebrovascular Accident Timing Given
Source code to detect odd values: Where cva = 'Yes' and (cvawhen = 'No' or cvawhen = 'Missing')
Definition: Has a history, at any time prior to surgery, of a central neurologic deficit persisting more than 72 hours. (i.e. extremity weakness or loss of motion, loss of consciousness, loss of speech, field cuts). Chart documentation of a prior diagnosis of CVA or stroke is sufficient.

8. **Field Name**: RF-CVA-When
Short Name: CVAWhen
Valid Values: <=2 weeks; >2 weeks
Data Type/Format: Text
Field Length: 9
Soft Edits (CCORP): No Cerebrovascular Accident Indicated, but Cerebrovascular Accident Timing Given
Source code to detect odd values: Where (cva = 'No' or cva = 'Missing') and cva when = '<=2 weeks' or cvawhen = '>2 weeks'
Definition: Events occurring within two weeks of the surgical procedure are considered recent (<=2 weeks); all others are considered remote (>2 weeks).

9. **Field Name**: Arrhythmia
Short Name: Arrhyth
Valid Values: Yes; No
Data Type/Format: Text; Yes/No
Field Length: 3
Soft Edits (CCORP): Arrhythmia Indicated but No Arrhythmia Type Given
Source code to detect odd values: Arrhyth = 'Yes' and (ArrhyTyp = 'No' or ArrhyTyp = 'Missing')
Definition: A preoperative arrhythmia present within two weeks of the procedure, by clinical documentation of any one of the following:
    - Atrial fibrillation/flutter requiring medication.
    - Heart block.
    - Sustained Ventricular Tachycardia or Ventricular Fibrillation requiring cardioversion and/or intravenous amiodarone.

10. **Field Name**: Arrhythmia Type
Short Name: ArrhyTyp
Valid Values: Sust VT/VF; Heart Block; Afib/Flutter
Data Type/Format: Text
Field Length: 12
Soft Edits (CCORP): No Arrhythmia Indicated but Arrhythmia Type Given
Source code to detect odd values: Arrhyth = 'No' or Arrhyth = 'Missing' and ArrhyTyp = 'Sust VT/VF' or ArrhyTyp = 'Heart Block' or ArrhyTyp = 'Afib/Flutter'
Definition: The type of arrhythmia present within two weeks of the procedure is:
    - Sustained Ventricular Tachycardia or Ventricular Fibrillation requiring cardioversion and/or intravenous amiodarone.
    - Heart Block.
    - Atrial fibrillation/flutter requiring medication.

11. **Field Name**: MI
Short Name: MI
Valid Values: Yes; No
Data Type/Format: Text; Yes/No
Field Length: 3
Soft Edits (CCORP): Myocardial Infarction Indicated but No Myocardial Infarction Timing Given
Source code to detect odd values: MI = 'Yes' and (MIWhen = 'No' or MIWhen = 'Missing');
Definition: Refers to any myocardial infarction (MI) in the past. For MIs prior to the current hospitalization for which detailed records are not available, chart documentation in which a clinician caring for the patient diagnosed an MI is sufficient. For MIs during the current hospitalization for which detailed records are available, conditions A and B below must all be met:

A) The patient must have been diagnosed with a myocardial infarction (ST elevation or non ST elevation) by a clinician caring for patient.

B) At least 1 of the 3 following biochemical indicators for detecting myocardial necrosis must be present:
   1) Troponin T or I:
      a. Maximal concentration of troponin T or I exceeding the MI diagnostic limit (99^{th} percentile of the values for a reference control group, as defined in section C) on at least one occasion during the first 24 hours after the index clinical event.
   2) CK-MB:
      a. Maximal value of CK-MB more than two times the upper limit of normal on at least one occasion during the first 24 hours after the index clinical event.
      b. Maximal value of CK-MB, preferable CK-MB mass, exceeding 99^{th} percentile of the values for a reference control group, as defined in section C, on two successive samples during the first 24 hours after the index clinical event.
   3) Total CK:
      a. In the absence of availability of a troponin or CK-MB assay, total CK more than two times the upper limit of normal (99^{th} percentile of the values for a reference control group, as defined in section C), or the B fraction of CK may be employed, but these last two biomarkers are considerably less satisfactory than CK-MB.

C) Reference control values (MI diagnostic limit and upper limit of normal):
   1) Reference values must be determined in each laboratory by studies using specific assays with appropriate quality control, as reported in peer-reviewed journals. Acceptable imprecision (coefficient of variation) at the 99^{th} percentile for each assay should be defined as less than or equal to 10 percent. Each individual laboratory should confirm the range of reference values in their specific setting.

12. **Field Name**: MI-When
Short Name: MIWhen
Valid Values: <=6 hours; 7-23 hours; 1-7 days; 8-21days; >21 days.
Data Type/Format: Text
Field Length: 10
Soft Edits (CCORP): No Myocardial Infarction Indicated but Myocardial Infarction Timing Given

Source code to detect odd values: (MI = 'No' or MI = 'Missing') and MIWhen = '<=6 hours' or MIWhen = '7-23 hours' or MIWhen = '1-7 days' or MIWhen = '8-21days' or MIWhen = '>21 days'
Definition: Time period between the last documented myocardial infarction and the CABG surgery.

13. **Field Name**: Angina
Short Name: Angina
Valid Values: Yes; No
Data Type/Format: Text; Yes/No
Field Length: 3
Soft Edits (CCORP): Angina Indicated but No Angina Type Given
Source code to detect odd values: Angina = 'Yes' and (AngType = 'No' or AngType = 'Missing')
Definition: The patient has ever had angina pectoris.

14. **Field Name**: Angina-Type
Short Name: AngType
Valid Values: Stable; Unstable
Data Type/Format: Text
Field Length: 8
Soft Edits (CCORP): No Angina Indicated but Angina Type Given
Source code to detect odd values: (angina = 'No' or angina = 'Missing') and AngType = 'Stable' or AngType = 'Unstable'
Definition The type of angina present within 24 hours prior to CABG surgery is:
- Stable: Angina not meeting unstable criteria below.
- Unstable: Requires continuous hospitalization from the episode until surgery and one of the following:
  1. Angina at rest.
  2. New onset angina in past 2 months of at least Canadian Cardiovascular Society (CCS) Class III.
  3. Increasing angina in past 2 months - angina that has become more frequent, longer in duration, or lower in threshold; and increased by greater than or equal to 1 CCS class to at least CCS Class III severity.

15. **Field Name:** Prior Card Op Req Bypass-#
Short Name: PrCBNum
Soft Edits (CCORP): 4 or fewer prior Cardiac Operations Requiring Cardiopulmonary Bypass expected.
Source code to detect odd values:
Where PrCBNum > 4.

16. **Field Name:** Prior Card Op No Bypass-#
Short Name: PrCNNum
Soft Edits (CCORP): 4 or fewer prior Cardiac Operations Without Cardiopulmonary Bypass expected.
Source code to detect odd values:
Where PrCNNum > 4

17. **Field Name:** Hemo Data-EF
Short Name: HDEF

Soft Edits (CCORP): Ejection Fraction outside expected 10 to 90 percent range.
Source code to detect odd values:
Where (HDEF > 90 or HDEF < 10).

18. **Field Name**: Hemo Data-EF Method
Short Name: HDEFMeth
Valid Values: LV Gram; Radionuclide; Estimate; ECHO
Data Type/Format: Text
Field Length: 12
Soft Edits (CCORP): No Ejection Fraction Given, but Method of Measurement Listed
Source code to detect odd values: Where ef = 'Missing' or ef = '0' and (ef_type = 'LV Gram' or ef_type = 'Radionuclide' or ef_type = 'Estimate' or ef_type = 'ECHO')
Definition: Method of obtaining ejection fraction measurement information:

- LV Gram: Left Ventriculogram.
- Radionuclide: MUGA Scan.
- Estimate: From other calculations, based upon available clinical data.
ECHO: Echocardiogram.

19. **Field Name:** Num Dis Vessels
Short Name: NumDisV
Soft Edits (CCORP): Number of Diseased Coronary Vessels must be $\geq$ 2 if Left Main Disease is > 50%
Source code to detect odd values:
Where LMainDis is > 50 and (NumDisV = 0 or NumDisV = 1)

20. **Field Name**: Conversion to CPB
Short Name: ConvCPB
Valid Values: Yes; No
Data Type/Format: Text; Yes/No
Field Length: 3
Soft Edits (CCORP): Conversion to CPB cannot be 'Yes' if CPB Used is 'No'
Source code to detect odd values: Where conversion = 'Yes' and cpbused = 'No'
Definition: The patient needed to be placed on cardiopulmonary bypass (CPB) after the off-pump procedure was attempted.

3) CCORP Field Export Order for Data Submissions

Field Short Names for data columns appear bolded in parenthesis and should appear on the first line of the comma-delimited ASCII file.

1) Medical Record Number **(MedRecN)**
2) Isolated CABG **(isocabg)**
3) Date of Surgery **(SurgDt)**
4) Date of Birth **(DOB)**
5) Patient Age **(Age)**
6) Gender **(Gender)**
7) Race **(Race)**
8) Date of Discharge **(DischDt)**
9) Discharge Status **(MtDCStat)**
10) Date of Death **(MtDate)**
11a) Surgeon Last Name **(SurgLname)**
11b) Surgeon First Name **(SurgFname)**
11c) Surgeon Middle Initial **(SurgMI)**
12) Responsible Surgeon CA License Number **(surglicnum)**
13) Height (cm) **(HeightCm)**
14) Weight (kg) **(WeightKg)**
15) Diabetes **(Diabetes)**
16) Hypertension **(Hypertn)**
17) Peripheral Vascular Disease **(PVD)**
18) Cerebrovascular Disease **(CVD)**
19) Cerebrovascular Accident **(CVA)**
20) Cerebrovascular Accident Timing **(CVAWhen)**
21) Chronic Lung Disease **(ChrLungD)**
22) Immunosuppressive Treatment **(ImmSupp)**
23) Hepatic Failure **(hepafail)**
24) Dialysis **(Dialysis)**
25) Last Creatinine Level Preop (mg/dl) **(CreatLst)**
26) Left Main Disease (% Stenosis) **(lmstenpct)**
27) Number of Diseased Coronary Vessels **(NumDisV)**
28) Mitral Insufficiency **(VDInsufM)**
29) Ejection Fraction (%) **(HDEF)**
30) Ejection Fraction Method **(HDEFMeth)**
31) Myocardial Infarction **(MI)**
32) Myocardial Infarction Timing **(MIWhen)**
33) Arrhythmia **(Arrhyth)**
34) Arrhythmia Type **(ArrhyTyp)**
35) Cardiogenic Shock **(CarShock)**
36) Angina **(Angina)**
37) Angina Type **(AngType)**
38) CCS Classification **(ClassCCS)**
39) Congestive Heart Failure **(CHF)**
40) NYHA Classification **(ClassNYH)**
41) Number of Prior Cardiac Operations Requiring Cardiopulmonary Bypass **(PrCBNum)**
42) Number of Prior Cardiac Operations Without Cardiopulmonary Bypass **(PrCNNum)**

43) Status of the Procedure **(Status)**
44) Cardiopulmonary Bypass Used **(CPBUsed)**
45) Conversion to Cardiopulmonary Bypass **(ConvCPB)**
46) Primary Incision **(PrimInc)**
47) Cardioplegia **(Cplegia)**
48) Internal Mammary Artery(ies) Used as Grafts **(IMAArtUs)**
49) Prior PCI **(PCI)**
50) Interval from Prior PCI to Surgery **(PCIIntv)**
51) Facility Identification Number **(hospitalid)**

4) Value Conversions for STS Data Elements with Parent-Child Relationships

In general, all fields that are coded Yes/No or list numbers of times/events should NOT be left blank, but instead be coded as “No” or “0”, respectively. The following are specific data elements where we strongly encourage STS data tool vendors to make the following modifications for data exported to CCORP.

Parent Field	Child Field (STS Short Name)	Conversion
RF-Renal Failure	Dialysis (Dialysis)	Convert child field blank/missing values to “No” when parent field is ‘No’
Prev CV intervent	Number of Prior Cardiac Operations requiring Cardiopulmonary Bypass (PrCBNum)	Convert child field blank/missing values to “0” (zero) when parent field is ‘No’
Prev CV intervent	Number of Prior Cardiac Operations Without Cardiopulmonary Bypass (PrCNNum)	Convert child field blank/missing values to “0” (zero) when parent field is ‘No’
Prev CV intervent	Prior PCI (PCI)	Convert child field blank/missing values to “No” when parent field is ‘No’

Note: Italics represent parent fields that CCORP does not collect

5. Surgeon Certification of Data

The CCORP regulations require that each surgeon identified as the “responsible surgeon” (see data element definition) in a semiannual hospital report certify to the accuracy of the reported data for his or her CABG surgeries. To certify to their data, the surgeons must complete and sign a CCORP Surgeon Certification Form. **The regulations require that all Surgeon Certification Forms be provided to CCORP at the same time as the data submission by the hospital.**

The Proposed Surgeon Certification Form occurs on the next page.

CALIFORNIA CABG OUTCOMES REPORTING PROGRAM
Surgeon Certification Form

OSH-CCORP 415 (New 10/02)

Healthcare Quality and Analysis Division
818 K Street, Room 200
Sacramento, California 95814
(916) 322-9700 FAX (916) 322-9718

Surgeon's name: _____ _____ _____
(First) *(Middle Initial)I* *(Last)*

California Physician License Number: | | | | | | |

Hospital name: _____

Facility Identification Number: | | | | | | |

Report period: *From:* | | | | | | *To:* | | | | | |
(Month) *(Day)* *(Year)* *(Month)* *(Day)* *(Year)*

Total records: _____

Statement of Certification

I, _____, affirm that the cases assigned to me in this
(Name of Surgeon)
California CABG Outcomes Reporting Program report are accurate, and that I have reviewed these data for accuracy and completeness. I also understand that these data, after any corrections or revisions required by the Office of Statewide Health Planning and Development, will be used to compute my risk-adjusted mortality rate for coronary artery bypass graft surgery, and that the Office of Statewide Health Planning and Development will assign data elements with invalid or missing values the lowest risk value as observed in the most current risk-adjustment model for predicting mortality.

Name: _____

Signature: _____ Dated: _____

Address: _____

Telephone: _____

E-mail: _____